

PCT

REQUEST

The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty.

For receiving Office use only

International Application No.

International Filing Date

Name of receiving Office and "PCT International Application"

Applicant's or agent's file reference
(if desired) (12 characters maximum) N.77933A JCI

Box No. I TITLE OF INVENTION

DIAGNOSTIC AND THERAPEUTIC EPITOPE, AND TRANSGENIC PLANT

Box No. II APPLICANT

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

ISIS INNOVATION LIMITED

Ewert House, Ewert Place
Oxford
OX2 7BZ
United Kingdom

This person is also inventor.

Telephone No.

Facsimile No.

Teleprinter No.

State (that is, country) of nationality:

GB

State (that is, country) of residence:

GB

This person is applicant all designated States all designated States except the United States of America the United States of America only the States indicated in the Supplemental Box

Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S)

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

ANDERSON, Robert Paul

Molecular Immunology, Nuffield Dept of Medicine
Room 7604, Level 7, John Radcliffe Hospital
Headington, Oxford OX3 9DU
United Kingdom

This person is:

applicant only

applicant and inventor

inventor only (If this check-box is marked, do not fill in below.)

State (that is, country) of nationality:

GB

State (that is, country) of residence:

GB

This person is applicant all designated States all designated States except the United States of America the United States of America only the States indicated in the Supplemental Box

Further applicants and/or (further) inventors are indicated on a continuation sheet.

Box No. IV AGENT OR COMMON REPRESENTATIVE; OR ADDRESS FOR CORRESPONDENCE

The person identified below is hereby/has been appointed to act on behalf of the applicant(s) before the competent International Authorities as: agent common representative

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)

IRVINE, Jonquil Claire
J.A. KEMP & CO.,
14 South Square,
Gray's Inn,
London, WC1R 5LX,
United Kingdom.

Telephone No.

+44 20 7405 3292

Facsimile No.

+44 20 7242 8932

Teleprinter No.

23676

Address for correspondence: Mark this check-box where no agent or common representative is/has been appointed and the space above is used instead to indicate a special address to which correspondence should be sent.

Continuation of Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S)

If none of the following sub-boxes is used, this sheet should not be included in the request.

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

HILL, Adrian Vivian Sinton
Wellcome Trust Centre for Human Genetics
University of Oxford
Roosevelt Drive
Oxford OX3 7BN
United Kingdom

This person is:

applicant only
 applicant and inventor
 inventor only (If this check-box is marked, do not fill in below.)

State (that is, country) of nationality:
IE

State (that is, country) of residence:
UK

This person is applicant for the purposes of: all designated States

all designated States except the United States of America

the United States of America only

the States indicated in the Supplemental Box

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

JEWELL, Derek Parry
Gastroenterology Unit
Gibson Building
Radcliffe Infirmary
Woodstock Road
Oxford OX2 6HE
United Kingdom

This person is:

applicant only
 applicant and inventor
 inventor only (If this check-box is marked, do not fill in below.)

State (that is, country) of nationality:
GB

State (that is, country) of residence:
GB

This person is applicant for the purposes of: all designated States

all designated States except the United States of America

the United States of America only

the States indicated in the Supplemental Box

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

This person is:

applicant only
 applicant and inventor
 inventor only (If this check-box is marked, do not fill in below.)

State (that is, country) of nationality:

State (that is, country) of residence:

This person is applicant for the purposes of: all designated States

all designated States except the United States of America

the United States of America only

the States indicated in the Supplemental Box

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

This person is:

applicant only
 applicant and inventor
 inventor only (If this check-box is marked, do not fill in below.)

State (that is, country) of nationality:

State (that is, country) of residence:

This person is applicant for the purposes of: all designated States

all designated States except the United States of America

the United States of America only

the States indicated in the Supplemental Box

Further applicants and/or (further) inventors are indicated on another continuation sheet.

Box No.V DESIGNATION OF STATES

The following designations are hereby made under Rule 4.9(a) (mark the applicable check-boxes; at least one must be marked):

Regional Patent

AP ARIPO Patent: GH Ghana, GM Gambia, KE Kenya, LS Lesotho, MW Malawi, MZ Mozambique, SD Sudan, SL Sierra Leone, SZ Swaziland, TZ United Republic of Tanzania, UG Uganda, ZW Zimbabwe, and any other State which is a Contracting State of the Harare Protocol and of the PCT

EA Eurasian Patent: AM Armenia, AZ Azerbaijan, BY Belarus, KG Kyrgyzstan, KZ Kazakhstan, MD Republic of Moldova, RU Russian Federation, TJ Tajikistan, TM Turkmenistan, and any other State which is a Contracting State of the Eurasian Patent Convention and of the PCT

EP European Patent: AT Austria, BE Belgium, CH and LI Switzerland and Liechtenstein, CY Cyprus, DE Germany, DK Denmark, ES Spain, FI Finland, FR France, GB United Kingdom, GR Greece, IE Ireland, IT Italy, LU Luxembourg, MC Monaco, NL Netherlands, PT Portugal, SE Sweden, and any other State which is a Contracting State of the European Patent Convention and of the PCT

OA OAPI Patent: BF Burkina Faso, BJ Benin, CF Central African Republic, CG Congo, CI Côte d'Ivoire, CM Cameroon, GA Gabon, GN Guinea, GW Guinea-Bissau, ML Mali, MR Mauritania, NE Niger, SN Senegal, TD Chad, TG Togo, and any other State which is a member State of OAPI and a Contracting State of the PCT (if other kind of protection or treatment desired, specify on dotted line)

National Patent (if other kind of protection or treatment desired, specify on dotted line):

<input checked="" type="checkbox"/> AE United Arab Emirates	<input checked="" type="checkbox"/> LC Saint Lucia	
<input checked="" type="checkbox"/> AG Antigua and Barbuda	<input checked="" type="checkbox"/> LK Sri Lanka	
<input checked="" type="checkbox"/> AL Albania	<input checked="" type="checkbox"/> LR Liberia	
<input checked="" type="checkbox"/> AM Armenia	<input checked="" type="checkbox"/> LS Lesotho	
<input checked="" type="checkbox"/> AT Austria	<input checked="" type="checkbox"/> LT Lithuania	
<input checked="" type="checkbox"/> AU Australia	<input checked="" type="checkbox"/> LU Luxembourg	
<input checked="" type="checkbox"/> AZ Azerbaijan	<input checked="" type="checkbox"/> LV Latvia	
<input checked="" type="checkbox"/> BA Bosnia and Herzegovina	<input checked="" type="checkbox"/> MA Morocco	
<input checked="" type="checkbox"/> BB Barbados	<input checked="" type="checkbox"/> MD Republic of Moldova	
<input checked="" type="checkbox"/> BG Bulgaria	<input checked="" type="checkbox"/> MG Madagascar	
<input checked="" type="checkbox"/> BR Brazil	<input checked="" type="checkbox"/> MK The former Yugoslav Republic of Macedonia	
<input checked="" type="checkbox"/> BY Belarus	<input checked="" type="checkbox"/> MN Mongolia	
<input checked="" type="checkbox"/> BZ Belize	<input checked="" type="checkbox"/> MW Malawi	
<input checked="" type="checkbox"/> CA Canada	<input checked="" type="checkbox"/> MX Mexico	
<input checked="" type="checkbox"/> CH and LI Switzerland and Liechtenstein	<input checked="" type="checkbox"/> MZ Mozambique	
<input checked="" type="checkbox"/> CN China	<input checked="" type="checkbox"/> NO Norway	
<input checked="" type="checkbox"/> CR Costa Rica	<input checked="" type="checkbox"/> NZ New Zealand	
<input checked="" type="checkbox"/> CU Cuba	<input checked="" type="checkbox"/> PL Poland	
<input checked="" type="checkbox"/> CZ Czech Republic	<input checked="" type="checkbox"/> PT Portugal	
<input checked="" type="checkbox"/> DE Germany	<input checked="" type="checkbox"/> RO Romania	
<input checked="" type="checkbox"/> DK Denmark	<input checked="" type="checkbox"/> RU Russian Federation	
<input checked="" type="checkbox"/> DM Dominica	<input checked="" type="checkbox"/> SD Sudan	
<input checked="" type="checkbox"/> DZ Algeria	<input checked="" type="checkbox"/> SE Sweden	
<input checked="" type="checkbox"/> EE Estonia	<input checked="" type="checkbox"/> SG Singapore	
<input checked="" type="checkbox"/> ES Spain	<input checked="" type="checkbox"/> SI Slovenia	
<input checked="" type="checkbox"/> FI Finland	<input checked="" type="checkbox"/> SK Slovakia	
<input checked="" type="checkbox"/> GB United Kingdom	<input checked="" type="checkbox"/> SL Sierra Leone	
<input checked="" type="checkbox"/> GD Grenada	<input checked="" type="checkbox"/> TJ Tajikistan	
<input checked="" type="checkbox"/> GE Georgia	<input checked="" type="checkbox"/> TM Turkmenistan	
<input checked="" type="checkbox"/> GH Ghana	<input checked="" type="checkbox"/> TR Turkey	
<input checked="" type="checkbox"/> GM Gambia	<input checked="" type="checkbox"/> TT Trinidad and Tobago	
<input checked="" type="checkbox"/> HR Croatia	<input checked="" type="checkbox"/> TZ United Republic of Tanzania	
<input checked="" type="checkbox"/> HU Hungary	<input checked="" type="checkbox"/> UA Ukraine	
<input checked="" type="checkbox"/> ID Indonesia	<input checked="" type="checkbox"/> UG Uganda	
<input checked="" type="checkbox"/> IL Israel	<input checked="" type="checkbox"/> US United States of America	
<input checked="" type="checkbox"/> IN India	<input checked="" type="checkbox"/> UZ Uzbekistan	
<input checked="" type="checkbox"/> IS Iceland	<input checked="" type="checkbox"/> VN Viet Nam	
<input checked="" type="checkbox"/> JP Japan	<input checked="" type="checkbox"/> YU Yugoslavia	
<input checked="" type="checkbox"/> KE Kenya	<input checked="" type="checkbox"/> ZA South Africa	
<input checked="" type="checkbox"/> KG Kyrgyzstan	<input checked="" type="checkbox"/> ZW Zimbabwe	
<input checked="" type="checkbox"/> KP Democratic People's Republic of Korea	Check-box reserved for designating States which have become party to the PCT after issuance of this sheet:	
<input checked="" type="checkbox"/> KR Republic of Korea	<input type="checkbox"/>	
<input checked="" type="checkbox"/> KZ Kazakhstan		

Precautionary Designation Statement: In addition to the designations made above, the applicant also makes under Rule 4.9(b) all other designations which would be permitted under the PCT except any designation(s) indicated in the Supplemental Box as being excluded from the scope of this statement. The applicant declares that those additional designations are subject to confirmation and that any designation which is not confirmed before the expiration of 15 months from the priority date is to be regarded as withdrawn by the applicant at the expiration of that time limit. (Confirmation (including fees) must reach the receiving Office within the 15-month time limit.)

Supplemental Box *If the Supplemental Box is not used, this sheet should not be included in the request.*

1. *If, in any of the Boxes, the space is insufficient to furnish all the information: in such case, write "Continuation of Box No. ... " [indicate the number of the Box] and furnish the information in the same manner as required according to the captions of the Box in which the space was insufficient, in particular:*

- (i) *if more than two persons are involved as applicants and/or inventors and no "continuation sheet" is available: in such case, write "Continuation of Box No. III" and indicate for each additional person the same type of information as required in Box No. III. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below;*
- (ii) *if, in Box No. II or in any of the sub-boxes of Box No. III, the indication "the States indicated in the Supplemental Box" is checked: in such case, write "Continuation of Box No. II" or "Continuation of Box No. III" or "Continuation of Boxes No. II and No. III" (as the case may be), indicate the name of the applicant(s) involved and, next to (each) such name, the State(s) (and/or, where applicable, ARIPO, Eurasian, European or OAPI patent) for the purposes of which the named person is applicant;*
- (iii) *if, in Box No. II or in any of the sub-boxes of Box No. III, the inventor or the inventor/applicant is not inventor for the purposes of all designated States or for the purposes of the United States of America: in such case, write "Continuation of Box No. II" or "Continuation of Box No. III" or "Continuation of Boxes No. II and No. III" (as the case may be), indicate the name of the inventor(s) and, next to (each) such name, the State(s) (and/or, where applicable, ARIPO, Eurasian, European or OAPI patent) for the purposes of which the named person is inventor;*
- (iv) *if, in addition to the agent(s) indicated in Box No. IV, there are further agents: in such case, write "Continuation of Box No. IV" and indicate for each further agent the same type of information as required in Box No. IV;*
- (v) *if, in Box No. V, the name of any State (or OAPI) is accompanied by the indication "patent of addition," or "certificate of addition," or if, in Box No. V, the name of the United States of America is accompanied by an indication "continuation" or "continuation-in-part": in such case, write "Continuation of Box No. V" and the name of each State involved (or OAPI), and after the name of each such State (or OAPI), the number of the parent title or parent application and the date of grant of the parent title or filing of the parent application;*
- (vi) *if, in Box No. VI, there are more than three earlier applications whose priority is claimed: in such case, write "Continuation of Box No. VI" and indicate for each additional earlier application the same type of information as required in Box No. VI;*
- (vii) *if, in Box No. VI, the earlier application is an ARIPO application: in such case, write "Continuation of Box No. VI", specify the number of the item corresponding to that earlier application and indicate at least one country party to the Paris Convention for the Protection of Industrial Property or one Member of the World Trade Organization for which that earlier application was filed.*

2. *If, with regard to the precautionary designation statement contained in Box No. V, the applicant wishes to exclude any State(s) from the scope of that statement: in such case, write "Designation(s) excluded from precautionary designation statement" and indicate the name or two-letter code of each State so excluded.*

3. *If the applicant claims, in respect of any designated Office, the benefits of provisions of the national law concerning non-prejudicial disclosures or exceptions to lack of novelty: in such case, write "Statement concerning non-prejudicial disclosures or exceptions to lack of novelty" and furnish that statement below.*

GOLDIN, Douglas Michael; ELLIS-JONES, Patrick George Armine; BARLOW, Roy James; SENIOR, Alan Murray; BENTHAM, Stephen; AYERS, Martyn Lewis Stanley; WOODS, Geoffrey Corlett; CRESSWELL, Thomas Anthony; SEXTON, Jane Helen; NICHOLLS, Michael John; MARSHALL Monica Anne; WEBB, Andrew John; KEEN, Celia Mary; PRICE, Nigel John King; IRVINE, Jonquil Claire; LEEMING, John Gerard; DUCKWORTH, Timothy John; MCCLUSKIE, Gail Wilson; WRIGHT, Simon Mark; SMITH, Samuel Leonard; BENSON, John Everett, CAMPBELL Patrick John; MERRYWEATHER, Colin Henry; DUCKETT, Anthony Joseph; BENTHAM, Andrew; and ROQUES, Sarah Elizabeth; SRINIVASAN, Ravi Chandran; TYSON, Robin Edward and BURNSIDE Ivan John of: J.A. KEMP & CO., 14 South Square, Gray's Inn, London, WC1R 5LX, United Kingdom.

Box No. VI PRIORITY CLAIM		<input type="checkbox"/> Further priority claims are indicated in the Supplemental Box.		
Filing date of earlier application (day/month/year)	Number of earlier application	Where earlier application is:		
		national application: country	regional application: [*] regional Office	international application: receiving Office
item (1) 1/10/1999 1 October 1999	9923306.6	GB		
item (2)				
item (3)				

The receiving Office is requested to prepare and transmit to the International Bureau a certified copy of the earlier application(s) (only if the earlier application was filed with the Office which for the purposes of the present international application is the receiving Office) identified above as item(s): (1)

* Where the earlier application is an ARIPO application, it is mandatory to indicate in the Supplemental Box at least one country party to the Paris Convention for the Protection of Industrial Property for which that earlier application was filed (Rule 4.10(b)(ii)). See Supplemental Box.

Box No. VII INTERNATIONAL SEARCHING AUTHORITY

Choice of International Searching Authority (ISA) (if two or more International Searching Authorities are competent to carry out the international search, indicate the Authority chosen; the two-letter code may be used): ISA /	Request to use results of earlier search; reference to that search (if an earlier search has been carried out by or requested from the International Searching Authority): Date (day/month/year) Number Country (or regional Office)		
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Box No. VIII CHECK LIST; LANGUAGE OF FILING

This international application contains the following number of sheets:	This international application is accompanied by the item(s) marked below:		
request : 5	<input checked="" type="checkbox"/> fee calculation sheet		
description (excluding sequence listing part) : 58	<input type="checkbox"/> separate signed power of attorney		
claims : 9	<input type="checkbox"/> copy of general power of attorney; reference number, if any		
abstract : 1	<input type="checkbox"/> statement explaining lack of signature		
drawings : 20	<input type="checkbox"/> priority document(s) identified in Box No. VI as item(s):		
sequence listing part of description : 0	<input type="checkbox"/> translation of international application into (language):		
Total number of sheets : 93	<input type="checkbox"/> separate indications concerning deposited microorganism or other biological material		
	<input type="checkbox"/> nucleotide and/or amino acid sequence listing in computer readable form		
	<input checked="" type="checkbox"/> other (specify): PF 23/77		

Figure of the drawings which
should accompany the abstract: Language of filing of the
international application: ENGLISH

Box No. IX SIGNATURE OF APPLICANT OR AGENT

Next to each signature, indicate the name of the person signing and the capacity in which the person signs (if such capacity is not obvious from reading the request).

IRVINE, Jonquil Claire

For receiving Office use only		
1. Date of actual receipt of the purported international application:		2. Drawings: <input type="checkbox"/> received: <input type="checkbox"/> not received:
3. Corrected date of actual receipt due to later but timely received papers or drawings completing the purported international application:		
4. Date of timely receipt of the required corrections under PCT Article 11(2):		
5. International Searching Authority (if two or more are competent): ISA /	6. <input type="checkbox"/> Transmittal of search copy delayed until search fee is paid.	

For International Bureau use only

Date of receipt of the record copy
by the International Bureau:

This sheet is not part of and does not count as a sheet of the international application.

PCT

FEES CALCULATION SHEET Annex to the Request

For receiving Office use only

International application No.

Date stamp of the receiving Office

Applicant's or agent's
file reference N.77933A JCI

Applicant
ISIS INNOVATION LIMITED

CALCULATION OF PRESCRIBED FEES

1. TRANSMITTAL FEE £ 55 T

2. SEARCH FEE £ 605 S

International search to be carried out by _____

(If two or more International Searching Authorities are competent in relation to the international application, indicate the name of the Authority which is chosen to carry out the international search.)

3. INTERNATIONAL FEE

Basic Fee

The international application contains 93 sheets.

first 30 sheets £ 264 b1

63 x £ 6 = £ 378 b2
remaining sheets additional amount

Add amounts entered at b1 and b2 and enter total at B £ 642 B

Designation Fees

The international application contains ALL designations.

8 x £ 56 = £ 448 D
number of designation fees amount of designation fee
payable (maximum 8)

Add amounts entered at B and D and enter total at I £ 1090 I

(Applicants from certain States are entitled to a reduction of 75% of the international fee. Where the applicant is (or all applicants are) so entitled, the total to be entered at I is 25% of the sum of the amounts entered at B and D.)

4. FEE FOR PRIORITY DOCUMENT (if applicable) £ 22 P

5. TOTAL FEES PAYABLE £ 1772

Add amounts entered at T, S, I and P, and enter total in the TOTAL box TOTAL

The designation fees are not paid at this time.

MODE OF PAYMENT

authorization to charge
deposit account (see below)

bank draft

coupons

cheque

cash

other (specify): _____

postal money order

revenue stamps

DEPOSIT ACCOUNT AUTHORIZATION (this mode of payment may not be available at all receiving Offices)

The RO/ is hereby authorized to charge the total fees indicated above to my deposit account.

(this check-box may be marked only if the conditions for deposit accounts of the receiving Office so permit) is hereby authorized to charge any deficiency or credit any overpayment in the total fees indicated above to my deposit account.

is hereby authorized to charge the fee for preparation and transmittal of the priority document to the International Bureau of WIPO to my deposit account.

Deposit Account No.

Date (day/month/year)

Signature